

### Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

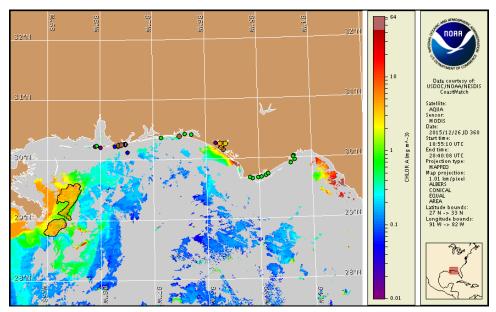
Monday, 28 December 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 24, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 18 to 23: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: <a href="http://tidesandcurrents.noaa.gov/hab/habfs\_bulletin\_guide.pdf">http://tidesandcurrents.noaa.gov/hab/habfs\_bulletin\_guide.pdf</a>

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

# **Conditions Report**

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore St. Bernard Parish in Louisiana; Harrison and Jackson counties in Mississippi; Mobile and Baldwin counties in Alabama; and portions of northwest Florida from Escambia to Franklin counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore Louisiana, Mississippi, Alabama, and northwest Florida Monday, December 28 to Thursday, December 31 is listed below:

**County Region:** Forecast (Duration) **St. Bernard Parish:** Very Low (M-Th)

Harrison County: Very Low (M, Th), Moderate (Tu-W) Harrison County, bay regions: Moderate (M-Th) Jackson County: High (M), Moderate (Tu-Th) Mobile County: High (M, Th), Moderate (Tu-W)

**Baldwin County:** High (M), Moderate (Tu-W), Very Low (Th)

**Baldwin County, east bay regions:** Low (M-Th) **Escambia County:** Moderate (M-W), Very Low (Th)

Escambia County, bay regions: Low (M-Th)
Santa Rosa County: Moderate (M-W), Very Low (Th)

Santa Rosa County, bay regions: Low (M-Th)
Okaloosa County: Moderate (M-W), Very Low (Th)

Okaloosa County, bay regions: Low (M-Th)

Walton County: Moderate (M-Th)
Bay County: Moderate (M-W), Low (Th)
Bay County, bay regions: High (M-Th)
Gulf County: Very Low (M), Low (Tu-Th)

Gulf County, west bay regions-St. Joseph Bay area: High (M), Moderate (Tu-Th)

Gulf County, east bay regions-Indian Lagoon area: High (M-Th)

Franklin County: Low (M-Th)

Franklin County, bay regions: Moderate (M-Th)

All Other NWFL County Regions: None expected (M-Th)

SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check <a href="http://tidesandcurrents.noaa.gov/hab/beach\_conditions.html">http://tidesandcurrents.noaa.gov/hab/beach\_conditions.html</a> for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at <a href="http://tidesandcurrents.noaa.gov/hab/hab\_health\_info.html">http://tidesandcurrents.noaa.gov/hab/hab\_health\_info.html</a>. Respiratory irritation and dead fish were reported from Escambia, Okaloosa, and Gulf counties, FL.

### **Analysis**

No new *Karenia brevis* sampling information has been received since the previous bulletin when conditions indicated background to 'high' *K. brevis* concentrations along- and offshore from St. Bernard Parish, LA to Franklin County, FL. Over the past few days, reports of respiratory irritation and fish kills have been received from Escambia, Okaloosa, and Gulf counties (MML; 12/25-28). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

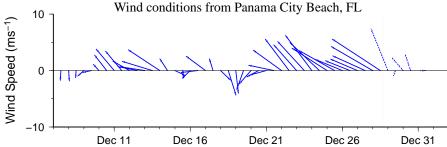
To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at:  $\frac{\text{http://tidesandcurrents.noaa.gov/hab/bulletins.html}}{\text{http://tidesandcurrents.noaa.gov/hab/bulletins.html}}$ 

Recent ensemble imagery (MODIS Aqua, 12/26), has been obscured by clouds along the coast from St. Bernard Parish, Louisiana, to Bay County, Florida, limiting analysis. In recent imagery, patches of elevated to very high chlorophyll (2 to >20  $\mu$ g/L) with the optical characteristics of *K. brevis* are visible offshore St. Bernard Parish, Louisiana, and alongshore Bay County and Gulf County, Florida.

Forecasted winds today through Thursday may promote the potential for westerly transport of surface *K. brevis* concentrations along the coasts of Louisiana, Mississippi, Alabama, and northwest Florida.

#### Davis, Lalime

Wind conditions from Panama City Reach, FI

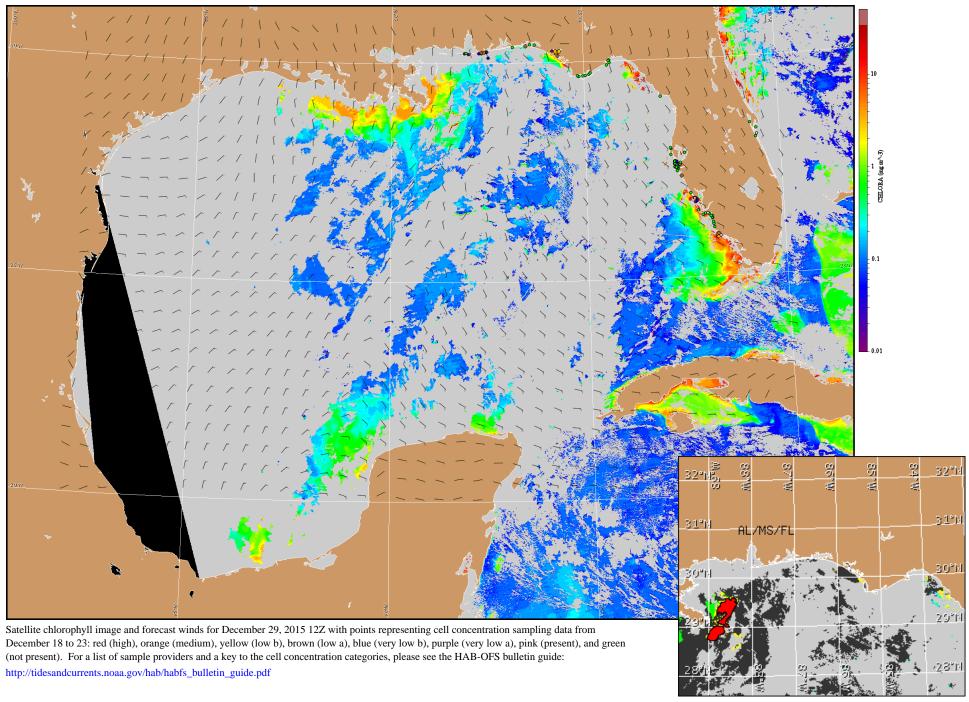


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

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# Wind Analysis

**Escambia to Gulf counties**: South winds (15-20kn, 8-10m/s) today. Southeast winds (10-15kn, 5-8m/s) Tuesday. South to southwest winds (5-15kn, 3-8m/s) Wednesday. West winds (10kn, 5m/s) Thursday becoming north winds (10-20kn, 5-10m/s) Thursday afternoon and evening.



Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).